

United States Patent [19]

Liedloff et al.

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[54] **PREPARATION OF BLOCK
POLYURETHANE-AMIDES**

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[56] **References Cited**

U.S. PATENT DOCUMENTS

3,428,710 2/1969 Daumiller et al. 525/424

3,718,713 2/1973 Tanaka et al. 525/424
3,892,820 7/1975 Goto et al. 525/424
4,578,447 3/1986 Humphrey 525/424

FOREIGN PATENT DOCUMENTS

7138981 11/1971 Japan 525/424

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[57] **ABSTRACT**

A method for the preparation of block polyurethane amides in a melt by the reaction of

(a) a linear polyamide having terminal carboxylic acid ester groups and which melts at not more than 210° C.; and

(b) a polyurethane having hydroxyl groups at its chain ends;

at a temperature of 160° C. to 240° C., and in the presence of a trans-esterification accelerator.

27 Claims, No Drawings